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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,104	04/30/2001	Gavan Tredoux	A0840	1617

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EXAMINER

BLAIR, DOUGLAS B

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/845,104

Applicant(s)

TREDOUX ET AL.

Examiner

Douglas B Blair

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) *
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/1/2003, 5/2/2002.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. The term "slow stream" in claim 17 is a relative term which renders the claim indefinite. The term "slow stream" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, 4-9, 11-13 and 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Number 5,673,322 to Pepe et al..
6. As to claim 1, Pepe teaches a reverse proxy network communication scheme comprising: a proxy agent located inside a protected network addressable by a least one internal network device, the proxy agent establishing outgoing network connections (col. 8, lines 16-25); a

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security device through which all traffic between the protected network and external networks must travel, the security device permitting at least outgoing connections via at least one predetermined network protocol (col. 8, lines 16-25); an external proxy server outside the protected network and reachable by the proxy agent via outgoing network connections through the security device, the external proxy server also being addressable by at least one external network device, thereby allowing communication between the at least one external network device and the at least one internal network device (col. 8, lines 6-15).

7. As to claim 2, Pepe teaches the scheme of claim 1 wherein the at least one predetermined network protocol is HTTP (col. 7, lines 47-57).

8. As to claim 4, Pepe teaches the scheme of claim 1 wherein the external proxy server is in communication with at least one other network, receives, and stores data addressed to the at least one internal network device (col. 8, lines 6-15).

9. As to claim 5, Pepe teaches the scheme of claim 4, wherein the proxy agent polls the external proxy server to check for data addressed to the at least one internal network device (col. 8, lines 26-60).

10. As to claim 6, Pepe teaches the scheme of claim 5 wherein the proxy agent downloads data addressed to the at least one internal network device from the external proxy server and forwards the data to the at least one internal network device (col. 8, lines 26-60).

11. As to claim 7, Pepe teaches the scheme of claim 4 wherein the external proxy server ensures proper cookie routing (col. 8, lines 26-60).

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12. As to claim 8, Pepe teaches the scheme of claim 1, wherein the proxy agent forwards outgoing data to the external proxy server, which transmits the data to the at least one external network device (col. 8, lines 6-15).

13. As to claim 9, Pepe teaches a method of accessing an internal network device on a protected network, the network including a security device, the method comprising: storing data addressed to the internal network device in an external proxy server (col. 8, lines 26-60); maintaining a proxy agent on the protected network, the proxy agent executing the step of: polling the external proxy server for data addressed to the internal network device (col. 8, lines 26-60); forwarding to the internal network device any data on the external proxy server and addressed to the internal network device (col. 8, lines 26-60); and forwarding to the external proxy server any data addressed to an external device in communication with the external proxy server (col. 8, lines 6-15).

14. As to claim 11, Pepe teaches the method of claim 9 further comprising communicating by the internal network device with the external proxy server using a first network protocol and the external network device communicates with the external proxy server using a second network protocol (col. 8, lines 16-25).

15. As to claim 12, Pepe teaches the method of claim 11 wherein data addressed to the internal network device using the second network protocol is transmitted to the internal device using the first network protocol so that the second network protocol is carried to the internal network device inside the first network protocol (col. 8, lines 16-25).

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16. As to claim 13, Pepe teaches the method of claim 9 further including multiplexing multiple requests from the proxy agent to the external proxy server through the same connection (col. 8, lines 26-60).

17. As to claim 17, Pepe teaches the method of claim 9 wherein polling comprises connecting the external proxy server to check for pending traffic; returning a stream of spurious bytes ignored by the proxy agent if there is nothing pending (col. 8, lines 26-60); immediately transmitting data form the external proxy server to the proxy agent when the external proxy server receives data form a client, thus closing the connection to flush any buffering performed by intervening proxy servers (col. 8, lines 26-60).

18. As to claim 18, Pepe teaches the method of claim 9 wherein communication between the proxy agent and the external proxy server is encrypted (col. 10, lines 29-37).

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 3, 19-20, and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 5,673,322 to Pepe et al. in view of U.S. Patent Number 6,510,464 to Grantges, Jr. et al..

21. As to claim 3, Pepe teaches the scheme of claim 1, however Pepe does not explicitly teach a scheme with an outgoing proxy server.

Grantges teaches a scheme including an outgoing proxy server in communication with a proxy agent and which the proxy agent uses to establish outgoing connections (col. 4, lines 7-22).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Pepe regarding the use of a proxy agent to contact an external proxy with the teachings of Grantges regarding the use of an outgoing proxy server because an outgoing proxy server improves system performance (Grantges, col. 2, line 55-col. 3, line 4).

22. As to claim 19, Pepe teaches the scheme of claim 1, however Pepe does not explicitly teach a scheme with encryption using SSL for HTTP.

Grantges teaches a scheme for encryption using SSL for HTTP (col. 4, lines 23-32).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Pepe regarding the use of a proxy agent to contact an external proxy with the teachings of Grantges regarding the use of SSL for HTTP because SSL provides secure and fast messaging (Grantges, col. 4, lines 23-32).

23. As to claim 20, Grantges teaches a method wherein a proxy agent and an external proxy server require X.509 certificates (col. 6, lines 12-27).

24. As to claim 22, Pepe teaches the scheme of claim 1, however Pepe does not explicitly teach a scheme for providing network administrators control over the ability to allow and deny entry on a per session basis.

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Grantges teaches a method for providing network administrators control over the system including granting administrators the ability to allow and deny entry into the protected network on a per session basis (col. 7, line 63-col. 8, line 14).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Pepe regarding the use of a proxy agent to contact an external proxy with the teachings of Grantges regarding control by administrators of sessions because such control allows administrators the control user authentication (Grantges, col. 7, line 63-col. 8, line 14).

25. As to claim 23, Grantges teaches a method wherein access is conferred by granting a key with a predetermined life span (col. 7, lines 63-col. 8, line 14).

26. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 5,673,322 to Pepe et al. in view of U.S. Patent Number 6,621,827 to Rezvani et al..

27. As to claim 10, Pepe teaches the method of claim 9; however Pepe does not explicitly teach polling the external proxy server at regular intervals.

Rezvani teaches polling an external proxy server at regular intervals (col. 15, lines 25-37).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Pepe regarding the use of a proxy agent to contact an external proxy with the teachings of Rezvani regarding polling at regular intervals because data may be waiting for a client at any time (Rezvani, col. 15, lines 25-37).

28. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 5,673,322 to Pepe et al. in view of U.S. Patent Number 5,826,014 to Coley et al..

29. As to claim 14, Pepe teaches the method of claim 9, however Pepe does not explicitly teaching mapping ports to proxy agents.

Coley teaches a method of maintaining by an external proxy server maps between local TCP/IP ports of the external proxy server and private IP addresses on a protected network, the maps being distinguished by an identity of the proxy agent used to access them (col. 7, lines 35-63).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Pepe regarding the use of a proxy agent to contact an external proxy with the teachings of Coley regarding the mapping of ports to proxy agents because mapping a proxy agent to a particular port increases processing efficiency (Coley, col. 7, lines 51-54).

30. As to claim 15, Coley teaches a method of publishing by each proxy agent a list of addresses it can reach to an external proxy server, the external proxy server using this list to create a respective map between local ports and proxy agents (col. 9, lines 33-60).

31. As to claim 16, Pepe teaches a method of ensuring cookie delivery (col. 8, lines 26-60).

32. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 5,673,322 to Pepe et al. in view of International Application WO 00/68823 by Lawrence et al..

33. As to claim 21, Pepe teaches the method of claim 9, however Pepe does not teach rewriting cookies.

Lawrence teaches a method of rewriting cookies with unique identifiers to prevent inadvertent transmission of private information to an incorrect recipient on the protected network (page 2, line 19-page 3, line 7).


It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Pepe regarding the use of a proxy agent to contact an external proxy with the teachings of Lawrence regarding the rewriting of cookies because rewriting cookies protects the identifies of surfers (Lawrence, page 1, lines 14-19).

Conclusion

34. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas B Blair whose telephone number is 703-305-5267. The examiner can normally be reached on 8:30am-5pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey can be reached on 703-305-9705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


ZARNI MAUNG
PRIMARY EXAMINER

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Douglas Blair

A handwritten signature in black ink, appearing to be 'DBB' with a stylized flourish at the end.